GRADE 6 – REVIEW - TEST CHAPTER 4 - **Answers**

1. The small, negatively charged particles discovered by J.J. Thomson are called \_\_**ELECTRONS**\_ .
2. Constructing a \_\_**MODEL**\_\_\_would be most useful for describing atoms.
3. What group, on the periodic table contains elements that are gases at room temperature? **THE NONMETALS**
4. The atomic number of manganese is 25; its mass number is 55. How many neutrons does an atom of manganese have in its nucleus? **30**
5. An element's atomic number is the number of \_**PROTONS**\_ in the nucleus of each atom of that element.
6. Rutherford called the positively charged, central part of the atom the \_**NUCLEUS**\_\_ .

1. What is the difference between a mixture and a compound?
2. What are the major characteristics of most metals?
3. Atoms of the same element that have different numbers of neutrons are called \_\_**ISOTOPES**\_\_.
4. Democritus believed that the universe was made of empty space and \_**ATOMS**\_.
5. A(n) \_\_**ELEMENT**\_ is a material that cannot be broken down into simpler materials by ordinary means.
6. Scientists have broken down protons and neutrons into smaller particles called \_\_**QUARKS**\_ .

1. An example of a synthetic element is \_\_(**ANY ELEMENT OVER 93**)\_ .
2. The atomic mass of an element is \_\_**AVERAGE MASS**\_ of that element.
3. What nineteenth century scientist designed the atomic theory of matter?

**DALTON**

1. An atom containing six positive charges and six negative charges has \_**NO**\_\_ charge.
2. The \_\_**PERIODIC TABLE**\_ is a chart created by chemists to organize the elements.
3. James Chadwick named the uncharged particles in the atomic nucleus \_\_**NEUTRON**\_ .
4. On an “element key”, where is the atomic mass located? **UNDER THE ELEMENT’S NAME**
5. According to the periodic table, how many electrons does an atom of krypton have?  **36**
6. What is the same for two atoms of the same element that are isotopes?

**THE NUMBER OF PROTONS**

1. What part or parts of an atom accounts for most of its mass?

**THE NUCLEUS**

1. What is the mass number of an atom that has 2 protons and 3 neutrons? **5**
2. How can most of the elements on the periodic table be classified? **METALS**
3. What do we call molecules that come together without bonding? **MIXTURE**
4. Mendeleev arranged families of elements \_\_\_\_\_\_\_\_\_\_\_\_\_\_(direction) in his periodic table.

1. From left to right, what is the order of zones on a periodic table?

**METALS, METALOIDS, NON-METALS**

1. According to the periodic table, iodine will have similar chemical and physical properties to which elements?

**FLUORINE, CHLORINE, BROMINE AND ASTATINE**

1. Which gas is a noble gas? Any of the following is correct: **HELIUM, NEON, ARGON, KRYPTON, XENON, RADON**
2. The \_**ELEMENT**\_ **KEY**\_ contains the name, atomic number, symbol, and atomic mass of an element.
3. Hydrogen is a \_\_**GAS**\_ at room temperature?
4. A(n) \_\_**GROUP**\_ of elements on the modern periodic table contains elements with similar chemical and physical properties.

1. What are some common properties of nonmetals?

# Shiny luster

# Good conductors of heat and electricity

# Most are solids at room temperature

# Malleable, or can be shaped

# Ductile, or can be drawn into wire without breaking